

# Toothpicks Come Alive

## **The Action**

The absorption of water by the toothpicks causes them to move.

## **Grade Level**

Grade 8 - Plant Growth

## **Materials**

- 5 toothpicks (the flat kind)
- Water
- Eye dropper

## **Instructions**

- Bend all 5 toothpicks in half. (Note: do not completely break the toothpicks, they should be bent but still attached.) You will end up with each toothpick forming a V shape.
- On a flat surface, place the toothpicks so that the points of all the V's are touching.
- Place a drop of water in the center where all the toothpicks are touching. The water will cause the toothpicks to move and form a star shape.

## **Safety**

No safety cautions. Be aware of slivers.

## **Hints**

Try to get the drop of water as close to the center of the V's as possible. If the first drop is off center more water may be needed.

## **Science Principle**

The drop of water is quickly absorbed by the toothpicks wood fibres through capillary action. Water also diffuses through the fiber walls. Both effects cause the toothpicks to straighten up, resulting in the change in shape.